An Empirical Investigation of the Social Coping Strategies Used by Gifted Adolescents

Mary Ann Swiatek
Department of Psychology, State University of New York, College at Fredonia

Abstract

The formation of an identity during adolescence is believed to be facilitated by conformity to others and membership in a peer group. Because gifted adolescents in a typical school setting often experience difficulties in conformity and peer group membership, they can be expected to face some unique challenges during adolescence. The current study seeks empirical evidence for discrete strategies that gifted adolescents may use to cope with perceived social difficulties. Highly gifted students who were identified by the Study of Mathematically Precocious Youth and who participated in a rigorous summer academic program completed a survey that was specifically designed to reflect coping strategies proposed in the literature. The results of the survey were factor analyzed and yielded five meaningful factors: denial of giftedness, popularity/conformity, peer acceptance, fear of failure, and activity level. The results of the factor analysis suggest that further research focusing on the measurement of social coping strategies among gifted adolescents is warranted.

The preponderance of research on the psychosocial adjustment of gifted students indicates that such individuals are well adjusted (Silverman, 1993a). Nevertheless, questions have been raised regarding students' perceptions of the social consequences of being identified as gifted (e.g., Coleman, 1985; Guskin, Zimmerman, Okolo, & Peng, 1986; Karnes & Ochler-Stinnett, 1986; Kerr, Colangelo, & Gaeth, 1988; Silverman, 1990). Several authors have suggested that identified gifted students may take unique approaches to coping with the social issues that surround their abilities (e.g., Buescher, 1983; Buescher & Higham, 1983; Coleman, 1985; Coleman & Cross, 1988; Delisle, 1984; Tenenbaum, 1991; Tidwell, 1980; Zigler & Farber, 1985), and it has been suggested that further study be devoted to the investigation of such coping strategies (Coleman & Cross, 1988). This article presents an empirical study of the various social coping strategies that have been presented in the literature.

Psychosocial Development Among Gifted Adolescents

Identity development and peer relationships. Theoretical conceptualizations of adolescence help to explain why the social aspects of giftedness can be expected to assume particular salience during this developmental stage. According to Erikson (1963; 1983), adolescence involves the formation of an identity—a task that may be difficult for people with "deviant endowments" (p. 437) because American adolescence is characterized by "the standardization of individuality and the intolerance of differences" (p. 437). The application of this point to gifted students is supported by several authors (Buescher, 1983; Coleman, 1985; Coleman, Cross, 1988; Delisle, 1984; Guskin, et al., 1986; Janos, Fung, & Robinson, 1985), who suggest that feelings of "differentness" may be problematic for gifted adolescents. Thus, the identity formation of gifted individuals may be complicated by a perception (on the part of either the gifted or the general cohort of individuals) that their high ability makes it impossible for them to conform to the norm, which is set by average ability students.

In addition, Erikson (1963) states that the process of identity formation is promoted by the establishment of well-defined peer groups. Noting that many other authors agree with Erikson's statement, Dunphy (1983) defines a peer group as one in which "members are of similar [chronological] age and regard each other as acceptable associates" (p. 376). Unfortunately, this definition of peer group can be difficult to apply to gifted students in a typical school setting.

Dunphy's (1983) definition rests upon the assumption that children of approximately equal chronological age are...

Putting The Research to Use

The process of identifying and labeling gifted students can highlight the differences between these students and their average-ability schoolmates. The identification of discreet strategies gifted individuals use to cope with their "differentness" from others and to manage their social lives can help teachers and counselors understand behaviors they may observe in their gifted students. Also, this study paves the way for investigations of the relationships between the various coping strategies and other indicators of student adjustment (e.g., self-esteem, satisfaction with school, future plans). Through the information to be obtained from such investigations, students may be helped to develop strategies that are useful to them socially, but do not hinder continuing academic achievement and motivation.
also approximately equal in their levels of functioning and, therefore, are socially compatible. The precocity often evident in intellectually gifted children (Feldhusen, 1991), however, may render the majority of such children inappropriate for inclusion in a chronological-age peer group (Silverman, 1990). Not surprisingly, it has been found that gifted students tend to prefer older students for friends (see Janos & Robinson, 1985). A further complicating factor is that, although adolescents may accept high ability in their classmates, they are less likely to accept a demonstrated interest in academic pursuits (Tannenbaum, 1962, 1991) or the achievement of outstanding grades (Brown & Steinberg, 1990). Very highly gifted students may be particularly likely to encounter social difficulties (Silverman, 1993a; Tannenbaum, 1962) since they are often concerned with abstract and complex issues before such concerns arise among their chronological peers and because their interests may be quite different from those of the general cohort of students (Gross, 1989). In effect, highly gifted children who are not involved in special programming and, therefore, not given an opportunity to meet older or precocious individuals, may be left with no suitable peer group (see Silverman, 1993a).

Because gifted individuals can experience difficulty with tasks that are important to the formation of an identity (i.e., conforming to others and fitting into an appropriate peer group), one might expect social issues to become prominent during adolescence. Indeed, the literature shows that gifted adolescents associate their high ability with potential social difficulties and express concern over these perceived difficulties (e.g., Guskin, et al., 1986; Karnes and Oehler-Stinnett, 1986).

Attitudes toward being identified as gifted. Among gifted students, the need for appropriate companionship is often coupled with a strong motivation to achieve. For many such individuals, especially those who are highly gifted, these two areas conflict with one another (Gross, 1989):

If the gifted child is to satisfy his drive for excellence, he must risk sacrificing the attainment of intimacy with his age peers. If the pursuit of intimacy is his primary need, he must moderate his standards of achievement, conceal, to some extent at least, his intellectual interests, and conform to a value system that may be seriously at variance with his own level of moral development. (p. 193)

Given these potentially conflicting motivations, perhaps it is not surprising that research investigating students’ feelings about being labeled gifted has yielded inconsistent results. Some studies indicate that gifted individuals give positive evaluations to special academic programs and to the practice of identifying gifted students (Guskin, et al., 1986; Hershey & Oliver, 1988). Other researchers note that, at least for some students, the gifted label may be a source of discomfort. Robinson (1990) notes that “there is a sizeable group, approximately one out of every six youths, who report extreme discomfort [with the gifted label]” (p. 254). Also, along with their apparently positive general findings, Guskin, et al. (1986) discuss some indications that students may not be entirely comfortable with their acknowledged giftedness: “The gifted and talented label is apparently seen as a mixed blessing...while these students are quite willing to view themselves as highly competent, personable, etc., they do not want to be seen as outstanding or too different from others...they seem very aware of the potential for rejection if they are set apart as an elite” (p. 64).

Concerns about possible social rejection appear to be common among gifted students. Kerr, Colangelo, and Gaeth (1988) suggest that gifted students may perceive their giftedness positively from a personal standpoint, but simultaneously believe that others view it negatively (see also Colangelo & Brower, 1987). Karnes and Oehler-Stinnett (1986) investigated gifted adolescents’ rankings of stressful events and found that being labeled gifted was not rated as stressful, but items related to social status were rated as quite stressful. Brown and Steinberg (1990) note that highly-achieving high school students resist being given the socially undesirable label of “brain.” Even very young gifted children have been noted to be sensitive to the perceptions of others (Kerr, 1985) and to pressures to conform socially (Roedell, 1986), although the demand for social conformity with average-ability peers may be most strongly felt during adolescence (Coleman, 1985).

Social Coping

It has been suggested that researchers explore the methods by which gifted adolescents cope with perceived social difficulties (Coleman & Cross, 1988), but few quantitative, empirical studies have been published that are designed to directly address this issue. Those studies that do exist, in combination with the less empirical literature, suggest that any of a number of possible coping strategies may be used by gifted students. Several possible coping strategies are considered in the present study.

Minimizing the visibility of giftedness. Several authors (Buescher & Higham, 1989; Coleman, 1985; Coleman & Cross, 1988; Cross, Coleman, & Techel-Youkens, 1991; Delisle, 1984; Gross, 1989; Tannenbaum, 1991; Zigler & Farber, 1985) suggest that gifted students may actively attempt to minimize the visibility of their giftedness. Stated differently, gifted students may strive to hide their giftedness in order to fit in better at school and to obtain social approval. Some specific strategies reported by students include underachievement (Tannenbaum, 1991; Zigler & Farber, 1985), the use of less sophisticated vocabularies when among same-age peers than when among family members or other trusted individuals (Gross, 1989), and the use of a variety of verbal approaches to regulate the type and extent of information about their abilities available to other students (Cross, et al., 1991).

Denying giftedness. Buescher (1985) suggests that, partially in response to “the power of peer pressure and conformity” (p. 13), gifted adolescents may deny that
they are gifted. There is some indirect evidence that this approach may be productive. Janos, Fung, and Robinson (1985) found lower self-concepts among gifted students who felt different from other students than among those who did not feel different. Thus, an effective coping strategy for gifted students may be to convince themselves that they are not gifted and, therefore, are not different from others.

Denying concern about possible social rejection. Students who acknowledge their giftedness may claim not to care about others' opinions or social responses. Such individuals may intellectualize their reactions to perceived social rejection (Johnson, 1981). In fact, students may be encouraged to discount the importance of popularity as it is traditionally understood in schools (i.e., "selective evaluation"; Gibbons & Gerrard, 1990; Taylor, Wood, & Lichtman, 1983). For example, in a presentation to a group of gifted adolescents, Kimm (1988) noted that "[The term] Popular...simply reverses the kids who've managed to compromise enough values so that lots of people like them...It is neither bad nor good in itself to be popular — only unimportant" (p. 44). Tidwell (1980) suggests that gifted students may discount the importance of popularity because they can experience personal success through their abilities and, therefore, forego "applause from their peers" (p. 68).

Extracurricular involvement. In contrast to strategies aimed at hiding their abilities, gifted students may choose to display their talents — especially their non-academic talents. For example, highly able students may become involved in many extracurricular activities (Brown & Steinberg, 1990; Buescher & Higham, 1989; Coleman, 1985). Perhaps since participation in organized activities is partly a social endeavor, gifted students obtain social fulfillment from such involvement. Also, groups emphasize the similarities among their members, thereby enhancing feelings of belonging — a function that may be especially important to gifted students, for whom feelings of "difference" may be problematic (see Janos, Fung, & Robinson, 1985). In addition, it is possible that gifted students use their involvement in extracurricular activities as a means of distracting others from their high levels of academic achievement (Brown & Steinberg, 1990). As early as 1962, Tannenbaum noted that athletic interests, in particular, have an extremely positive influence on peer attitudes toward an individual, regardless of that individual's intellectual ability.

Fear of failure. Fear of failure has been defined as a concern that failure may result in the loss of self-esteem or others' esteem (Fried-Buchalter, 1992). Gifted individuals, especially those who are introverted, are often characterized as suffering from a fear of failure (Silverman, 1993b). Fear of failure may be related to a tendency toward perfectionism (e.g., Blackburn & Erickson, 1986; Buescher, 1985; Buescher & Higham, 1989; Rouper, 1982; Silverman, 1993b), as the setting of extremely high standards for oneself is also considered to be related to fear of failure (Fried-Buchalter, 1992).

Purpose of Study. This study seeks preliminary quantitative support for the coping strategies described above. Some previous research (e.g., Buescher & Higham, 1989) has studied students' use of various coping strategies; the present study is different in that its primary purpose is to verify the existence of the strategies as discreet factors. It is expected that the results will provide an indicator of the feasibility of further pursuing the issue of social coping through the use of self-report instruments such as the one presented here. In addition, although fear of failure is not a social coping strategy, items related to it are included in the social coping measure to permit exploration of its existence among a group of highly gifted students.

Method

Subjects. The subjects for this study are junior high school students who attended Challenges for Youth — Talented and Gifted (CY-TAG) in either 1989 or 1990. CY-TAG is an academic summer program for intellectually gifted students conducted through the Office of Precollegiate Programs for the Talented and Gifted (OPP-TAG) at Iowa State University. CY-TAG students reside on the University campus for three weeks, during which time each is enrolled in an accelerated class in an area of his or her choice. Qualification for the program is determined through the use of the Scholastic Aptitude Test (SAT; Dorlon, 1984) or the ACT (American College Testing Program, 1988, 1989), both of which are tests designed for high school seniors. This "out-of-level" testing removes the ceiling effect associated with the tests usually used with junior high school students, thereby allowing a more specific assessment of giftedness. The school grade levels of the students and the classes offered varied between 1989 and 1990; this information, along with qualifying test scores, is summarized in Table 1.

In both years, the qualifying test scores were set to identify approximately the top 1% of students in mathematical and/or verbal reasoning.

During the summer of 1989, a total of 114 students (66 males and 48 females) attended CY-TAG. Ninety-one of these students (52 males and 39 females) were selected for the present study according to their willingness to respond to previous surveys.

Excluding individuals who had participated in CY-TAG in 1989, 165 students (99 males and 66 females) attended CY-TAG 1990. Of the 165 students, 147 (85 males and 62 females) were surveyed for the present study. Thus the total number of gifted students included in this study was 238 (137 males and 101 females).

Instrumentation

Adjective Check List. The Adjective Check List (ACL; Gough & Heilbrun, 1983) is a standardized measure of various personal attributes. It consists of 300 adjectives, from which an individual marks those that he or she considers to be self-descriptive. The resulting pattern of responses is scored on 37 different scales. In this study, only the Affiliation scale was used. According to the ACL.
Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Grade Range</th>
<th>Age Range</th>
<th>Courses Offered</th>
<th>Qualifying Scoresa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>7-9</td>
<td>11-17</td>
<td>Computer Science</td>
<td>≥500 SAT-M</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Precalculus Math</td>
<td>≥21 ACT Composite</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prob./Stat.</td>
<td>≥21 ACT Math</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Latin</td>
<td>≥430 SAT-V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Expository Writing</td>
<td>≥21 ACT Composite</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Personal Writing</td>
<td>≥21 ACT English Usage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chemistry</td>
<td>≥930 SAT-M + SAT-V,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Earth Science</td>
<td>≥500 SAT-M</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>≥430 SAT-V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Latin</td>
<td>≥21 ACT Composite</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Exploratory Writing</td>
<td>≥21 ACT Natural Sciences</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pre-calculus Math</td>
<td>≥500 SAT-M</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Computer Science</td>
<td>≥20 ACT Math</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20th Century Physics</td>
<td>≥20 ACT Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Field Biology</td>
<td>≥930 SAT-M + SAT-V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mentorships</td>
<td>≥20 ACT Composite</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>≥20 ACT Science</td>
</tr>
</tbody>
</table>

*Scores listed are seventh-grade scores. Older students' scores were age-adjusted.

Procedure

The ACL was administered to CY-TAG students at the beginning of the session attended (i.e., either 1989 or 1990). The SCQ was mailed to selected students one or two years after their participation in CY-TAG. One dollar was enclosed with the SCQ in an attempt to increase response rates. Of the 238 SCQ surveys that were mailed, 213 (90%) were completed and returned. Three of the respondents, however, indicated that they were enrolled in schools for which exceptional academic ability was required for admission. These subjects were excluded from the study, as the SCQ was designed for students in a more typical school setting. Therefore, 210 of the completed SCQ surveys were used.

Exploring coping strategies. A factor analysis was conducted with the SCQ to determine whether the relationships among students' responses verify the existence of distinct approaches to giftedness. The factor analysis used the unweighted least squares method of factor extraction and a varimax rotation. The varimax rotation was chosen because it yields uncorrelated factors, thereby simplifying the interpretation of the results. Scores for each resulting factor were obtained in two ways. The "factor score"
method involved standardizing the responses to each item, then weighting each standardized response by the factor loading for the item in question and summing the weighted responses across all 35 items for each scale. This method was used in comparing group means on the scales. Because these scales were formed using standardized items, however, the overall mean for each scale is zero. Therefore, descriptive statistics based on the entire group (i.e., the internal consistency of the scales and the characteristics of the entire subject pool’s use of various strategies) were computed on approximations of the scales, which were obtained with the “mean raw response” method of scoring. This method used only the items that loaded strongly on a given factor, then averaged the raw responses to those items.

**Describing students’ social coping.** One assumption that underlies the SCQ is that adolescents feel a need to be popular. This assumption proceeds from the theoretical literature on adolescence (e.g., Dunphy, 1983; Erikson, 1965). Nevertheless, it is possible that some adolescents do not feel a need for popularity. This possibility complicates discussion of students’ methods of social coping. For example, the endorsement of items such as “I don’t worry about whether or not I am popular” by individuals with strong affiliation needs (“typical” adolescents, as portrayed in the literature) might constitute denial of those needs. The endorsement of the same items by adolescents who do not have strong affiliation needs might constitute simple statements of fact. Thus, to clarify the results, the responses given by students with low affiliation needs, defined here as scores that are more than one standard deviation below the norm on the Affiliation scale of the ACL (N=26; Gough & Heitbrun, 1983) were removed from all analyses except those assessing the reliability of the scales. It is interesting to note that a relatively small number of the students in the sample scored at this low level.

Individuals’ scores (“factor score” method) on the factors were compared with one another with a multivariate analysis of variance. Among students with strong affiliation needs, these scores were compared for students of different ability levels and ability areas. To determine ability level, contrasting groups were formed of students whose composite SAT or ACT scores represent the top 25% of the subject group and those whose scores represent the bottom 25% of the subject group. In determining ability area, age-adjusted SAT scores were standardized. Students whose standardized SAT-M scores were at least one standard deviation higher than their standardized SAT-V scores were used as a “high-math” group; students whose standardized SAT-V scores were at least one standard deviation higher than their standardized SAT-M scores were used as a “high-verbal” group.

In all comparisons of means, both statistical significance and effect size were considered. Only differences that were both statistically significant at the .05 level and of at least a medium effect size are presented. For differences between means, effect sizes (d) can be calculated by dividing the difference between the means by the standard deviation of the control group (or, if no control group exists, by the mean of the two standard deviations). Cohen (1988) classifies effect sizes as small when \(d=.20\), medium when \(d=.50\), and large when \(d=.80\).

**Results**

Consideration of the eigenvalues and the contents of the factors indicated that the most meaningful solution for the SCQ factor analysis consisted of five social coping factors: denial of giftedness, popularity/conformity, peer acceptance, fear of failure, and activity level (see Appendix). The eigenvalues of each factor, along with the variance each explains, are listed in Table 2. These factors were used to form scales for the exploration of the merits of the instrument and the characteristics of students’ responses.

The “mean raw response” method of scoring was used for the computation of internal consistency. Alpha values for the scales, based on all 210 subjects, ranged from 0.54 to 0.79 and are summarized in Table 3. This scoring method also was used to compute the mean scores for each of the five scales. These scores, based on highly affiliative individuals, ranged from 3.20 to 5.10 and are summarized in Table 4. The “factor score” method was used in a MANOVA to determine whether there were significant differences among the SCQ scale scores for the group as a whole. No differences were found.

The “factor score” method of scoring the scales also was used for comparisons of responses by gender, ability level, and ability area to determine whether there were significant differences, representing at least a medium effect size, for any of these groups. The results indicated that a) students in the top quartile of ability are more likely to deny their giftedness than are students in the bottom quartile [\(t(26)=1.29\) for top quartile, \(M=-0.76\) for bottom quartile; \(t(64)=2.59, p<.05, d=0.64\) and b) students whose major strength is in verbal ability report lower peer acceptance than do mathematically gifted students [\(t(31)=2.20, p<.05, d=0.82\). There were no differences according to gender.

<table>
<thead>
<tr>
<th>Social Coping Questionnaire (SCQ) factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor name</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Denial of giftedness</td>
</tr>
<tr>
<td>Popularity/conformity</td>
</tr>
<tr>
<td>Peer acceptance</td>
</tr>
<tr>
<td>Fear of failure</td>
</tr>
<tr>
<td>Activity level</td>
</tr>
</tbody>
</table>
Discussion

The main question addressed in this study, whether quantitative support can be obtained for the existence of discrete social coping strategies among gifted adolescents, was addressed through the SCQ factor analysis. Four of the five scales that were identified produce reliability values (α) greater than 0.60. Therefore, the scales reflecting denial of giftedness, popularity/conformity, peer acceptance, and fear of failure can be considered reliable for research purposes.

These factors help support the validity of certain previously suggested social coping strategies: denial of giftedness (Buescher, 1985), management of perceptions of the importance of popularity (see Johnson, 1981; Rimm, 1988), and strong involvement in organized activities (Coleman, 1985). Not all of the potential strategies (as drawn from the theoretical literature) for which items were written were supported, however. Most notably, the content of several items was directed at coping based on hiding one’s giftedness (e.g., "I try to hide my giftedness from other students"); "I try not to be too successful at the things I do"). These items did not form their own factor. Rather, they split up and fit into the other factors. Also, the scale reflecting involvement in organized activities was unreliable (i.e., α< 0.60, which is not reliable for research purposes).

In the areas assessed by the SCQ, some information about the social coping methods used by gifted adolescents may be gleaned through consideration of the students’ responses. The MANOVA results indicate that no coping strategy is predominant among the members of the sample. Neither were there any differences in SCQ factor scores according to gender. Two comparisons yielded statistically significant results that were of at least a medium effect size.

First, the most highly able individuals were those most likely to deny being gifted. Several explanations for this relationship are possible. Students who received very high SAT or ACT scores by the age of 13 may have had more difficulty believing them to be accurate than did students who received moderately high scores, especially if they had been given no feedback regarding the extent of their abilities prior to receiving their scores. A related possibility is that the most highly able students may feel more pressure to perform well academically than do the less highly gifted students and may be uncertain of their ability to measure up to others’ standards. Seen in this light, denial of giftedness may be an attempt to avoid being the focus of others’ high expectations. Also, it is possible that adolescents deny their abilities in order to conform to other students. In this case, it might be reasonable to expect that the most able students would exhibit the most denial, especially as research has shown that it is the most highly gifted individuals who often experience the most difficulty in social relationships (e.g., Gross, 1989; Hollingworth, 1942).

A second finding was that students with predominant verbal abilities reported lower levels of peer acceptance than did those with predominant mathematical abilities. The integration of two hypotheses regarding giftedness can help to clarify this finding. First, several authors (e.g., Buescher, 1985; Coleman, 1985; Coleman & Cross, 1988; Delisle, 1984; Gusklin, et al., 1986; Janos, Fung, & Robinson, 1985) have suggested that “differentness” may be a complicating factor in the social lives of gifted students. Second, it has been suggested that the abilities of highly verbally gifted students may be more obvious to others than are those of mathematically talented students (Dunbar & Benbow, 1990). As a result of this visibility, verbally gifted individuals may feel more different from other students than do their mathematically gifted counterparts and, therefore, perceive lower levels of peer acceptance.

This study is best understood as a pilot study; there are several limitations in its design. First, the students were drawn from a well-defined group and are not representative of the overall population of gifted adolescents. Second, a larger number of students would be preferable for the

<table>
<thead>
<tr>
<th>Factor (no. of items)</th>
<th>Mean (SD)</th>
<th>Range Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial of giftedness (11)</td>
<td>5.10 (1.07)</td>
<td>2.27</td>
<td>6.90</td>
</tr>
<tr>
<td>Popularity/conformity (7)</td>
<td>4.31 (0.87)</td>
<td>1.57</td>
<td>7.00</td>
</tr>
<tr>
<td>Peer acceptance (5)</td>
<td>3.20 (1.07)</td>
<td>1.00</td>
<td>6.40</td>
</tr>
<tr>
<td>Fear of failure (6)</td>
<td>3.80 (1.07)</td>
<td>1.33</td>
<td>7.00</td>
</tr>
<tr>
<td>Activity level (6)</td>
<td>3.22 (0.90)</td>
<td>1.50</td>
<td>5.67</td>
</tr>
</tbody>
</table>

aThe responses to individual items were given along the following scale:

1 = Strongly True
2 = Moderately True
3 = Somewhat True
4 = Neither True nor False
5 = Somewhat False
6 = Moderately False
7 = Strongly False
use of factor analysis. Third, the SCO is a new instrument and does not yet have established psychometric properties. Therefore, the results of this study are best considered exploratory and in need of replication (see Lykken, 1968). Nevertheless, the emergence of five psychologically meaningful factors, several of which reflect the strategies that have been proposed in the theoretical literature, is promising. Further research, which corrects the limitations of the present study, is needed to replicate and extend the findings obtained here.

References


